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maintaining a POS table that lists, for each high-priority packet that has entered the switch, a position of the high-priority packet in a queue of the switch, a time the high-priority packet entered the queue, and an intended destination of the high-priority packet; and

maintaining a Qmax table for storing a maximum allowed per-hop queuing delay for each of several possible intended destinations.

(previously presented) 25. The packet switch of claim 24 wherein the scheduler uses the Qmax table and the POS table to determine the node exit delay requirement for each of the high-priority packets in the queue of the switch.

(previously presented) 26. The packet switch of claim 24 wherein the maximum allowed per-hop queuing delay for each of several possible intended destinations is determined by determining a number of hops along the LSP and dividing a maximum queuing delay allowed for the LSP by the number of hops along the LSP to determine the maximum allowed per-hop queuing delay.

REMARKS

The Application has been carefully reviewed in light of the Office Action mailed October 17, 2007. At the time of this Office Action, Claims 1-11 and 13-26 were pending in the Application and Claims 1-11 and 13-26 were rejected. The following actions were taken or matters raised: (I) Claims 1, 6, 17 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al ("Cell Discarding Policies Supporting Multiple Delay and Loss

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Requirements in ATM Networks) in view of Aukia et al (US6594268); (II) Claims 8-12 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Onvural et al (U.S. Pub 2002/0150115 A1) in view of Aukia et al (US6594268); (III) Claims 2, 5, 18, 21, 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al ("Cell Discarding Policies Supporting Multiple Delay and Loss Requirements in ATM Networks) in view of Aukia et al (US6594268) and in further view of Onvural et al (U.S. Pub 2002/0150115 A1); (IV) Claims 3, 19, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al ("Cell Discarding Policies Supporting Multiple Delay and Loss Requirements in ATM Networks) in view of Aukia et al (US6594268) and in further view of Henderson et al (U.S. Pub 2003/0154328 A1); (V) Claims 7 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al ("Cell Discarding Policies Supporting Multiple Delay and Loss Requirements in ATM Networks) in view of Aukia et al (US6594268) and in further view of Huang et al (U.S. Pat 6546013); (VI) Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Onvural et al (U.S. Pub 2002/0150115 A1) in view of Aukia et al (US6594268) and Guerin et al (U.S. Pub 2003/0072270); (VII) Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Onvural et al (U.S. Pub 2002/0150115 A1) in view of Aukia et al (US6594268) and further in view of Huang et al (U.S. Pat 6546013); (VIII) Claims 4 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xie et al ("Cell Discarding Policies Supporting Multiple Delay and Loss Requirements in ATM Networks) in view of Aukia et al (US6594268) and Henderson et al (U.S. Pub 2003/0154328 A1), and further in view of Guerin et al (U.S. Pub 2003/0072270); (IX) the applicants arguments filed August 6, 2007 were acknowledged, but found to be moot and/or non-persuasive. In order to advance prosecution of this case by overcoming the rejections asserted by the Office, Claims 1, 8, 9,

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17 and 23 have been amended and remarks addressing the cited rejection have been presented herein. The Applicants respectfully request reconsideration and favorable action in this case.

Rejection Under 103(a)

Claims 1-11 and 13-26 have all been were rejected under 35 U.S.C. § 103(a) as being unpatentable over two or more cited references. In the rejection of each of Claims 1-11 and 13-26, Aukia et al (U.S. 6595268) is a cited and relied upon reference. The Applicants assert that, in view of amended independent Claims 1, 8, 17 and 23, the present invention as recited in independent Claims 1, 8, 17 and 23, and all other claims dependent thereon, is clearly distinguished from Aukia et al in combination with any one or more of the other references cited in the rejection of Claims 1-11 and 13-26 (i.e., Xie et al, Onvural et al, Henderson et al, Huang et al, and Guerin et al) and, therefore, assert that the present invention as recited in independent Claims 1, 8, 17 and 23, and all other claims dependent thereon provides advantageous, useful and non-obvious functionality in view of Aukia et al in combination with any one or more of the other cited references. Accordingly, the Applicants submit that the rejections under 35 U.S.C. § 103(a) applied to Claims 1-11 and 13-26 as unpatentable over Aukia et al in combination with one or more other cited references is overcome and respectfully requests the Office to withdraw the rejections asserted against Claims 1-11 and 13-26 as being unpatentable under 35 U.S.C. § 103(a).

More specifically, independent Claims 1, 8, 17 and 23 have been amended to characterize the invention with greater specificity in view of Aukia et al. Independent Claims 1, 8, 17 and 23 have each been amended to recite: "...the maximum per-hop queuing delay for a particular one of said intended destinations is a respective maximum per-hop queuing delay calculated dependent upon a number of hops in a label switched path ("LSP") between

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the switch and the particular one of said intended destination and wherein the respective maximum per-hop queuing delay is calculated only during set-up of the LSP and dependent upon a specified maximum end-to-end delay..." The cited referenced individually and/or in combination do not disclose: 1.) the maximum per-hop queuing delay for a particular one of said intended destinations being a respective maximum per-hop queuing delay calculated dependent upon a number of hops in a label switched path ("LSP") between the switch and the particular one of said intended destination and 2.) the respective maximum per-hop queuing delay being calculated only during set-up of the LSP and dependent upon a specified maximum end-to-end delay. Accordingly, a skilled person will appreciate that the functionality as provided by the present invention as recited in claims 1-11 and 13-26 is not capable of being provided by and is not intended to be provided by implementations of the disclosures by Aukia in combination with any of the other cited references.

Furthermore, the Applications submit that the Office has misconstrued the teachings of Aukia. Specifically, the Office has asserted that "Aukia et al disclose calculating end-to-end delay time for packets using maximum per-hop delay (col. 16 lines 28-42, 62-67 & col. 17 lines 1-7; table 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a maximum per-hop delay taught by Aukia et al in to the exit node (deadline) delay of Xie et al for similar purposes." As stated by Aukia (col. 17, lines 2-4, per-hop delays are calculated by dividing the end-to-end delay for the packet flow by the maximum number of hops for the packet flow. It must be understood that the maximum per-hop delays of Aukia (i.e., nodal delays) are different that the maximum allowed per-hop queuing delay of the claimed invention. Specifically, the nodal delays of Aukia include propagation delays and transmission delays as well as queuing delays whereas the maximum allowed per-hop queuing delay of the claimed invention does not include

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propagation delays or transmission delays. Furthermore, the nodal delays of Aukia are calculated on a per-packet flow basis as opposed to the maximum allowed per-hop queuing delay of the claimed invention being calculated on a per-LSP basis. Accordingly, applying the nodal delays of Aukia as suggested by the Office will not provide for the distinguishing functionality of the claimed invention.

In view of the amendments made to independent Claims 1, 8, 17 and 23 and the associated remarks, Claims 1, 8, 17 and 23, and all claims dependent thereon, are patentable under 35 U.S.C. 103(a) over the cited references (individually and in any combination) because they recite features, structure and/or function not present in, configured for being provided by, or capable of being provided by or intended to be provided by any combination of the cited references. Accordingly, the Applicants submit that the rejection under 35 U.S.C. § 103(a) applied to Claims 1-11 and 13-26 as being unpatentable over Aukia in combination with any of the other cited references is overcome and respectfully requests the Office to withdraw the rejection asserted against Claims 1-11 and 13-26 under 35 U.S.C. § 103(a).


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CONCLUSIONS

The Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for reasons clearly apparent, the Applicants respectfully request full allowance of all pending claims. If there are any matters that can be discussed by telephone to further the prosecution of the Application, the Applicants invite the Examiner to contact the undersigned at 512-306-8533 at the Examiner's convenience.

Respectfully submitted,

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